

# Work Order ID 55182

January 08, 2010 1:20:59 PM



Page 1

Item ID: D3978-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Nut

Start Date: 1/11/2010 Start Qty: 20.00



Cust Item ID:

Required Date: 1/18/2010 Req'd Qty: 20.00



Customer:

Reference:

Approvals: Process Plan: *mf*

Date: *10-01-08* Tooling:

Date:

Run Start



QC:

Date: SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3978

A

100

0.00



Purchasing

Memo

0.00

Purchasing

Issue P/O: *11073*

Purchase Part Number: 91853A031

Supplier: McMASTER-CARR

Certificate of conformity is required

*CL 10/01/08 (20)*

110

Receive & Inspect for Damage & Mat'l Certs

0.00



Packaging

Memo

0.00

Packaging

*P 10/1/12 (20)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 55182

January 08, 2010 1:20:59 PM

Page 2

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Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC6- Inspect dimensions to drawing

0.00

⇒ 8/10/01/13

counted

20

QC

Memo

0.00

Quality Control

130

Identify as per dwg & Stock Location: ST

0.00

MF 10-1-13

Packaging

Memo

0.00

Packaging

140

QC21- Final Inspection - Work Order Release

0.00

10/01/14

QC

Memo

0.00

Quality Control

MF  
10-1-14

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 08, 2010 1:20:58 PM

Page 1  
1

Work Order ID: 55182



Parent Item: D3978-1

Parent Item Name: Nut

Comments: IPP RevA: New issue DD verified by:EC

Start Date: 1/11/2010

Required Date: 1/18/2010

Start Qty: 20.00

Required Qty: 20.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
91853A031		Purchased	No			110	Each	0.0000	20.0000			



Nut



MF 10-1-13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

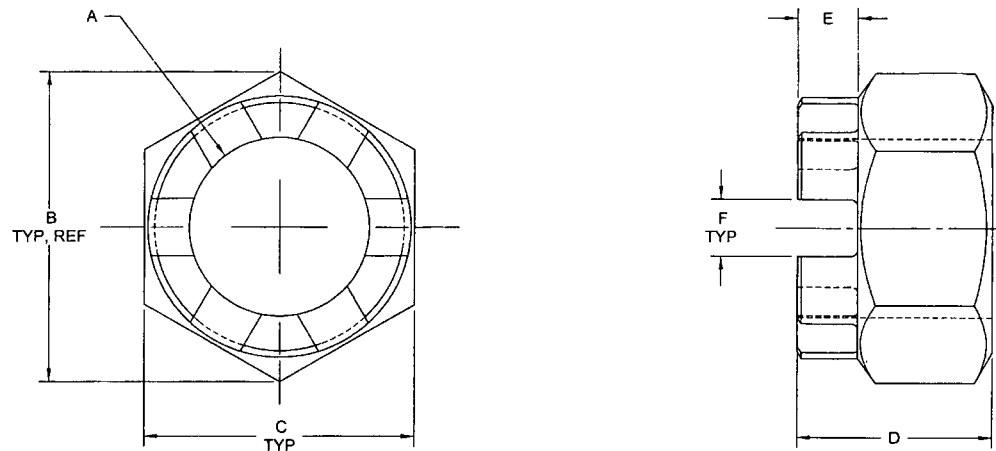
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# SPECIFICATION CONTROL DRAWING



## D3978-1 NUT (CASTELLATED), UNC

DART P/N	A	B	C	D	E	F	MATERIAL	WEIGHT (lbs)	SUPPLIER	SUPPLIER P/N
D3978-1	3/8-16 UNC	0.65	0.56	0.41	0.13	0.12	18-8 STAINLESS STEEL	0.02	McMASTER-CARR	91853A031

# 55182

RELEASED

- NOTES:**
- 1) MATERIAL: SEE TABLE
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: SEE TABLE

A	NEW ISSUE	MB	09.07.13
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3978	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		NUT (CASTELLATED), UNC	NTS
DATE	09.07.13	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





# McMASTER-CARR®

Purchase Order  
PO11073

Page 1 of 1

200 Aurora Industrial Parkway  
Aurora OH 44202  
330-995-5500  
cle.sales@mcmaster.com

Dart Aerospace Ltd  
1270 Aberdeen St  
Hawkesbury ON K6A 1K7  
Canada

McMaster-Carr Number  
5683739-02

01/08/2010

Line	Description	Ordered	Shipped		A11
2	92356A662 18-8 Stainless Steel Round Head Square Neck Carriage Screw, 3/8-16 Thread, 10" Length, Packs of 1	20 Packs	+ 15	2 - 716 - 07	24 - 02 A662 15PK One EA/PK 2
	Unit Price: \$6.04				
	Extended Price: \$90.60				
3	91853A031 18-8 Stainless Steel Slotted Hex Nut, Style B, 3/8"-16 Thread Size, 9/16" W, 13/32" Overall H, Packs of 1	20 Packs	20	2 - 700	3
	Unit Price: \$3.06				
	Extended Price: \$61.20				

8/10/08/13

Shipped separately from our Chicago warehouse on 01/08

1	2584A91 Left-Hand Thread High-Speed Steel Tap, Bottoming, 1-1/8"-7 NC, H4 Pitch Diameter, 4 Flute	1 Each	1
2	92356A662 18-8 Stainless Steel Round Head Square Neck Carriage Screw, 3/8-16 Thread, 10" Length	20 Packs	5

#### Charges for this shipment

Merchandise Amount:	\$151.80
Sales Tax:	\$7.59
<b>Total:</b>	<b>\$159.39</b>

Dart Aerospace Ltd

Assembly  
Area

11

Cycle

43

Shelf

115

Documents

2

EXP

4 lb:  
2 line

FW1WBP23  
01/08/2010  
12:57/13:37  
006





Dart Aerospace Ltd.  
1270 Aberdeen Street  
Hawkesbury, ON K6A 1K7  
Tel: 613 632 9577  
Fax: 613 632 1053

## PURCHASE ORDER

Purchase Order ID **PO11073**

Purchase Order Date 1/08/10

PO Print Date 1/08/10

Page Number 1 of 1

Order From :

VU-MCM001

MCMaster-CARR SUPPLY CO,  
P.O. BOX 7690  
CHICAGO, IL 60680-7690  
US

**FAXED**  
1/8/10

Contact Name  
Vendor Phone 330 995 5500  
Vendor Fax 330 995 9600  
Vendor Account Nbr

Buyer Chantal Lavoie  
Requisition Nbr  
Tax Resale Nbr 10127-2607  
Terms Net 30  
Currency USD  
FOB

Ship To : DART AEROSPACE LTD 1270 ABERDEEN  
HAWKESBURY, ON K6A 1K7  
CANADA

Line Nbr	Reference Revision ID Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	Req Qty/ Unit of Measure	Ship Method	Unit Price	Ext
1		2584A91LEFT HAND TAP	1/12/10 Yes	1.00 Each	Purolator ground	\$69.3400	
2	92356A662	Bolt	1/12/10 Yes	20.00 Each	Purolator ground	\$5.3500	
3	91853A031	Nut	1/12/10 Yes	20.00 Each	Purolator ground	\$0.5500	

Special Inst: AS PER DWG D3977 REV. A  
B55180  
MCMaster P/N: 92356A662

Special Inst: AS PER DWG D3978 REV. A  
B55182  
MCMaster P/N: 91853A031

CERTIFICATE OF CONFORMITY  
REQ'D UPON DELIVERY

PO Total:

Change Nbr: 1

Change Date: 1/08/10

No substitution or deviation without  
consent.  
Certificate of Conformity or Mater  
Certification required when applica